

EFFECT OF MARKET SENTIMENTS OVER THE GROWTH OF MUTUAL FUND SCHEMES AND ASSET UNDER MANAGEMENT: AN INSIGHT INTO INDIAN MUTUAL INDUSTRY

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ABSTRACT

The study shows the performance of Indian Mutual Fund Schemes in terms of number of Mutual Fund houses in India, Number of Mutual Fund Schemes category wise and portfolio wise and the Asset Under management of the Mutual Fund Schemes over the years. The effect of Market Sentiments over the change in the number of schemes have been studied. Also it is observed that there is a change in the Asset Under Management during Bullish and Bearish phase. The time period selected for the study is from 2002 till 2019. The data for this purpose is collected from AMFI for the years 2002 to 2019. Portfolio wise Mutual Funds schemes are categorized into Income, growth, balanced, liquid, gilt, ELSS and ETFs. Category wise the schemes are divided into open ended schemes, close ended schemes, Assured return and Interval schemes. The performance is studied category wise since there are times when some schemes are performing good and others are underperforming and vice versa. This is due to the effect of market sentiments. It is analyzed from the study that there is an increase in the number of Mutual fund houses and schemes in India over the period. It is also found that there is an improvement in the performance of the Mutual fund schemes over the years. The effect of market sentiments is also seen on the performance of schemes. The tools applied for the purpose of this research is percentage method to calculate annual growth and CAGR to calculate overall growth over the years.

KEYWORDS: *Mutual Fund, Market sentiments, Portfolio, Bull & Bear*

Received: Jun 28, 2018; **Accepted:** Jul 23, 2019; **Published:** Sep 03, 2019; **Paper Id.:** IJHRMROCT20192

1. INTRODUCTION TO THE INDIAN MUTUAL FUND INDUSTRY

In India, the first mutual fund made its entry in 1964 when Unit Trust of India launched its Unit Scheme (US) 64. Till 1986–87, UTI was the only Institution functioning as Mutual Fund in India and its first scheme (US-64) remained the largest Mutual Fund scheme in the country. The Investible funds of UTI increased to Rs.4563.7 crore in 1986–87 from Rs. 206.8 crore in 1976–77. In 1987, the Government of India permitted Public sector Banks to launch Mutual Funds. Consequently, during that period of five years it (1987–92) witnessed rapid expansion of the capital markets, both in terms of the total funds raised and turnover on the stock exchanges. The total funds raised through Public Sector Mutual Funds went up to Rs. 47733.5 crore in 1992–93. The period 1987–92 is termed as the broadening base phase of Mutual Fund Industry in India. The Government of India under its economic reforms and liberalization policy allowed Private sector to enter into Mutual Funds in February 1992.

The year 1993 marked a turning point in the history of Mutual Funds in India as the Securities and Exchange Board of India (SEBI) issued the Mutual Funds regulation in the beginning of this year. The cumulative resources mobilized by Mutual Funds increased to Rs. 75050.2 crores in 1994–95. The above may be attributed to the competition created due to the entry of large number of Private and Public sector mutual funds. However, the years 1995 and 1996

brought erosion in the value of investments of unit holders due to a decline in the NAVs of the equity funds. Investor's perception about Mutual Funds gradually turned negative because of the poor performance of all categories of Mutual Funds irrespective of the sector to which they were concerned. But beyond 1997, the flow of funds into the kitty of Mutual Funds sharply increased due to a more positive sentiment in the capital market, significant tax benefits, improvement in the quality of investor services, and use of better information technology.

1.1 Concept of Mutual Fund

A Mutual Fund is a financial intermediary that pools the savings of investors for collective investment in a diversified portfolio of securities. A fund is "mutual" as all of its returns minus its expenses, are shared by the fund investors. Mutual fund invests in a number of companies across various industries, sectors and securities. This diversification reduces the riskiness of the investments. They make possibility for an organized investment strategy, which, is hardly possible for an individual investor. Besides professional management and risk diversification, Mutual Funds offer the benefits of increased liquidity, flexibility, tax benefits, transparency and stability to the stock market. On account of the numerous benefits offered by mutual funds, they have grown phenomenally.

1.2 Market Sentiments

Market sentiments are the subjective measure of how investors are feeling about a security or market. Because feelings sometimes change more slowly than a market's underlying fundamentals, market sentiment helps explain why securities have a tendency to become either overvalued or undervalued (www.financialdictionary.com). Some investors plan to make investment decisions in a way that disregards market sentiment, while others attempt to profit from it. It is an intuitive feeling of the investment community regarding the expected movement of the stock market. Market sentiment is the general prevailing attitude of investors as to anticipate price development in a market. This attitude is the accumulation of a variety of fundamental and technical factors, including price history, economic reports, seasonal factors, and national and world events. For example, if investors expect upward price movement in the stock market, the sentiment is said to be bullish. On the contrary, if the market sentiment is bearish, if most investors expect downward price movement.

1.3 Market Sentiments and Mutual Fund Performance

The performance of Mutual fund scheme is judged under different Market conditions i. e. Bull and Bear phase to evaluate the whether the fund has underperformed or over performed under different situations. Mutual fund managers design their investment strategy by assessing the market sentiments and then only they would be able to successfully time the market. Successful fund managers are those who are capable of assessing correctly the direction of the market, whether bull or bear, by positioning their portfolios accordingly. If managers are expecting a declining market, they could change their portfolio suitably by increasing the cash percentage of the portfolio or by adjusting their equity investments in favor of defensive securities having lower beta. In case of a rising market, fund managers could reduce the cash position or adjust their equity portfolio in favor of aggressive securities having higher beta. By adjusting their portfolios correctly to the market timing, fund managers can generate superior returns compared to the market (Raju and Rao 2009). Mutual fund managers having good market timing abilities design the Investment portfolio pattern of the Mutual fund schemes by analyzing the sentiments. Various tools and techniques are applied to know the superiority of the schemes in relation to the other schemes in terms of judging the market timing skill of the fund managers.

2. LITERATURE REVIEW

Hasan (2013) discussed the performance of the Indian Mutual Fund Industry in the past and also the rate of growth it has achieved after being exposed to regulatory changes by SEBI and international factors. It was also analyzed that funds that are at least 5 years old have the ability to deliver higher than benchmark returns. He also found that the funds must have the ability to withstand market downturns better than its benchmarks.

Sekhhar (2013) intended to examine the role of Mutual Fund organization in financial inclusiveness with reference to performance through public and private sector. The data for the study was collected through secondary sources. However, Unit Trust of India had shown significant growth in the year 2008–2009. Hence, according to the study, 37 organizations in mutual fund industry were working together for financial inclusion.

Umarani (2012) made an attempt to assess the growth of funds and suggested certain steps that need to be taken by all the players of the industry in a rigorous manner to create an atmosphere that will take the Indian Mutual Fund industry to its next level of growth. It was found that most of the growth in the assets under management has come not due to the increased retail participation, but due to the higher corporate investments in liquid schemes of the industry and due to the appreciation of the capital markets

Kale and Panchpagesan (2012) presented an overview of the Indian Mutual Fund Industry and the reasons for its poor penetration, which is due to the lack of objective research. It was found that the industry keeps the entire global industry as its benchmarks. The sensitivity of fund flows to performance, and the importance of regulation to its growth have been largely under researched in India.

Sareen Prateek (2012) attempted to find out the growth in Indian Mutual Fund Industry. He studied the participation of retail and institutional investors in Mutual funds. The level of investment in Systematic Investment Plans viz a viz one time investment plan was also studied. In the study it was concluded that the Indian mutual fund industry has significantly high ownership from the institutional investors.

Geetha (2012) discussed the growth of Mutual Fund Industry in India in terms of Asset Under Management and also explained the important concepts involved in Mutual Funds. It was concluded in the study that Mutual funds in India is gaining importance because of various advantages offered by it such as diversification, regulatory oversight, choice of scheme, well regulated, no guarantees, fees and commissions and taxes.

Purandare and Mehra (2010) have assessed the key growth drivers for the industry and have identified the factors which may impede growth in the future. The study recommended that however, in order to fully establish inclusive growth, several components of such an initiative like investor awareness, broadening investor participation and product innovation need to be aligned.

Parmar (2010) evaluated the growth of Mutual Funds in India and examined the return from selected Mutual Fund schemes. Sample study period was January 2005 to December 2009. This study was completely based on the secondary data. Average, Standard deviation, beta, R squared and Sharpe ratio were used as tools of analysis The NAV of all the schemes had shown that in the January 2008 they had given highest return and in December 2008 they had given the lowest return.

Kumar, Gayatri and Kartikha (2010) analyzed the objectives, challenges and opportunities of Mutual fund. They explained that the challenges of the Mutual fund Industry is leading to consolidation of the industry, pressures on

margins, innovation and product differentiation and outsourcing trends. They concluded that this time is an interesting time for the industry. It is truly said that change is the only constant.

Pandey (2009) covered various aspect of mutual funds industry in India. He started the study with the basic concept of Mutual Fund and gave details about the growth of Mutual Fund Industry in India over a period of years. It also covered the different phases of growth of mutual fund industry. It was concluded in the study that Mutual Fund is gaining importance in India due to numerous advantages offered by it to the investors.

Samar (2009) analyzed the growth of Mutual fund industry in India. The secondary data was collected from the websites of AMFI, Value research, SEBI and India Infoline during the study period 2008–09. Sharpe Ratio was comparatively favorable in case of ICICI Prudential balance fund.

Bodla and Bishnoi (2008) aimed to bring out the trends in Mutual Fund Industry in India. The reference period ranged from 1998–2006. The study was based on secondary data which was collected from various websites and journals. The study brought out the facts that the mutual fund investors in India had 609 schemes with variety of features such as dividend, growth, cumulative interest income, monthly income plans, sectoral plans, equity linked schemes, money market schemes, etc. It was also highlighted that though both open-end and close-end schemes had registered excellent growth in fund mobilization, the former category of schemes is more popular among the investors. Portfolio-wise analysis has brought that income schemes have an edge over growth schemes in terms of assets under management.

Singh and Mall (2008) focused on the growth of the Mutual Fund Industry. Growth of Mutual funds in India was studied under various parameters like Assets under Management (AUM), resource mobilized and the transactions done by the Mutual Fund Industry in the stock market. The growth of Mutual Fund Industry in India was studied from April 2000 to Dec 2007. It was found in the study that the private sector mutual funds are having a lion's share of Asset Under Management and Open-ended funds dominated the Assets under Management.

Tripathi (1996) evaluated the growth and performance of Indian Mutual Fund Industry. He found that the Indian capital market has grown tremendously during the last few years. The study also suggested some measures to make Mutual Fund Industry successful in India.

Panigrahi (1996) studied the origin and growth of Mutual Fund Industry in India. She examined that why mutual funds have prospered in the last few years, what is the extent of growth and whether the regulatory framework for their operations reflects the change in environment. The study was based on secondary data which was collected from various websites. It was found in the study that Mutual Fund has been able to attract more investors due to its tight regulatory framework.

3. OBJECTIVE OF THE STUDY

- To examine the growth of mutual fund industry in India in terms of number of schemes and assets under management of various schemes.
- To study the growth year on year and CAGR.
- To study the pattern of number of schemes sector wise and category wise.
- To study the effect of market sentiments on category wise and sector wise AUM.

4. RESEARCH METHODOLOGY

Data and its Source

For the attainment of objective one of the study the data of asset under management, number of schemes and number of funds operating in India have been used. All this information has been collected from AMFI website. Quarterly newsletters have been downloaded from AMFI websites for the study period and the data is consolidated from these newsletters. The growth performance of India's mutual fund industry has been measured in terms of increase in numbers of schemes, amount of funds mobilised and assets under management.

Sample Size

The overall Mutual Fund Industry have been selected to study the growth.

Period of Study

The period of study for this objective is from the year 1997–98 to 2018–19.

Tools of Analysis

For the achievement of objective the data related to number of schemes and Asset under Management is collected for 17 years, the data is tabulated in various tables for the purpose of evaluating the trend in growth under different categories.

The data has been tabulated under various categories such as:

- Category wise AUM
- Portfolio wise AUM
- Category wise number of schemes
- Portfolio wise number of schemes
- Number of Mutual fund houses operating in India

4.1 Growth of Mutual Fund Industry

In India the first Mutual Fund made its entry in 1964 till 1987. UTI was the monopolist in the Mutual Fund Industry in 1987. Government of India permitted Public sector Banks to start their Mutual Funds. Then in 1992 Government of India permitted Private sector to enter into Mutual Funds. Year 1993 was marked as a turning point in the history of Mutual Funds as SEBI issued regulations for Mutual Funds. Because of these concerns the confidence of investors started increasing and investors found better and safe options of investment in Mutual Funds. It is the best suitable investment options for individuals/small investors as it provides portfolio diversification, convenience and affordability to the investors.

Table 1 shows the number of Mutual Fund houses operating in India from the year 2002–03 to the year 2018–19. In the year 2002–03 the number of Mutual fund houses were 33. The number came down to 29 in the years 2004–05 and 2005–06 then, there was a continuous increase in the number of Mutual Fund houses. It can be viewed from the table that in the year 2011–12 the number of Mutual Fund houses operating in India reached to 44. In the year 2012–13 the number is 43 which grew to 46 in the year 2013–14. A downtrend could be observed in the year 2014–15, 2015–16, 2016–17 and 2017–18 when the number of Mutual funds operating in India came down to 43, 42, 41 and 41 respectively due to deduction in Foreign sector Mutual Fund houses operating in India. In the year 2018–19 the number of Mutual fund houses number again rose to 42 due to addition of Yes Asset Management Mutual Fund entering into the Indian Private Sector Mutual Fund.

Table 1: Number of Mutual Fund Houses from March 2002-2019

Year/Category	Public Sector				Private Sector				Total
	1	2	3	4	5	6	7	8	
2002-03	5	0	0	4	7	0	6	11	33
2003-04	5	0	0	3	8	1	5	9	31
2004-05	3	1	0	2	10	0	3	10	29
2005-06	3	1	0	1	10	0	5	9	29
2006-07	3	1	0	1	10	0	5	10	30
2007-08	2	2	0	1	11	3	5	9	33
2008-09	1	2	1	1	14	5	5	6	35
2009-10	1	2	1	1	16	5	5	7	38
2010-11	2	2	1	1	18	7	4	6	41
2011-12	2	3	1	1	18	9	5	5	44
2012-13	2	4	1	1	17	8	6	4	43
2013-14	2	4	1	2	19	7	7	4	46
2014-15	2	4	1	2	19	5	7	3	43
2015-16	2	4	1	2	18	4	8	3	42
2016-17	3	3	1	2	18	4	7	3	41
2017-18	3	3	1	2	19	4	6	3	41
2018-19	-	8	-	2	21	6	5	1	42

Source: (Compiled From Quarterly Update, March Issue, AMFI)

Note: 1= bank sponsored, 2 =Bank Sponsored Predominantly Indian, 3 = Bank Sponsored predominantly Foreign, 4= Institutions 5= Indian, 6= Foreign, 7= JV Predominantly Indian, 8= JV Predominantly Foreign

Table 2: Category wise Total Number and Growth in Number of Mutual Fund Schemes

Year	Open ended Schemes		Close Ended Schemes		Assured Return Schemes		Interval Fund Schemes		Total	
	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ
1997-98	63		125		47				235	
1998-99	102	61.9	146	16.8	29	-38.3			277	17.87
1999-2000	168	64.7	128	-12.33	41	41.38			337	21.66
2000-01	240	42.85	118	-7.81	35	-14.63			393	16.62
2001-02	304	26.67	87	-26.27	26	-25.71			417	6.11
2002-03	329	8.22	47	-45.98	6	-76.92			382	-8.39
2003-04	363	10.33	40	-14.89					403	5.5
2004-05	403	11.02	48	20					451	11.91
2005-06	463	14.89	129	168.75					592	31.26
2006-07	486	4.98	270	109.3					756	27.7
2007-08	592	21.81	364	34.81					956	26.46
2008-09	589	-0.51	344	-5.49			68		1001	4.71
2009-10	641	8.83	202	-41.28			39	-42.64	882	-11.89
2010-11	727	13.42	368	82.18			36	-7.69	1131	28.23
2011-12	745	2.42	530	44.03			34	-5.56	1309	15.74
2012-13	751	0.8	501	-5.47			42	23.53	1294	-1.14
2013-14	777	3.46	796	58.88			65	54.76	1638	26.54
2014-15	810	4.24	1002	25.87			72	10.76	1884	15.01
2015-16	829	2.35	1513	51.00			78	8.33	2420	28.45
2016-17	829	0.00	1388	-8.26			64	-17.95	2281	-5.74
2017-18	840	1.33	1127	-18.80			31	-51.56	1998	-12.41
2018-19	894	6.43	1119	-0.71			29	-6.45	2042	2.20
CAGR	13.46%		11.00%		-33.75%		-8.17%		10.84%	
Ho	Rejected		Rejected						Rejected	
Ha	Accepted		Accepted						Accepted	

Source: (Compiled From Quarterly Update, March Issue, AMFI)

** Indicates significant growth at 99 percent level of confidence

4.2 Number of Mutual Fund Schemes

After presenting the number of Mutual Fund houses the forthcoming part is explaining the growth and trends of Mutual Fund on the basis of number of Mutual Fund schemes according to their categories and objective. The position of Mutual Fund schemes across various categories and portfolios is presented in table 2. The various categories of mutual funds include open-end, close-end and assured return schemes and interval funds. The portfolio wise classification comprises of Income, Growth, Balanced, Liquidity, Gilt and ELSS schemes. The year-on-year percentage change in number of schemes and market share has been analyzed and presented in different tables.

Hypothesis: that the number of schemes launched category wise have not grown significantly over the years.

Table 2 indicates that as per the category wise classification, the total number of Mutual Fund schemes have rose from 235 in the year 1997–98 to 1001 in 2008–09. In year 2009–10, total number of Mutual Fund schemes declined to 882, but again after 2009–10 a major rise is seen in the year 2010–11, 2011–12 and 2013–14 due to introduction of many new schemes in the close-ended category and open-ended category but interval schemes, which were newly introduced, were still reducing. The phenomenon of growth of number of schemes was sustained till May 2007–08 but, due to recession a major decline was observed as the number of schemes increased by 4.71 percent in the year 2008–09 and the number of schemes have registered negative growth in the year 2009–10 and 2012–13.

The growth of total number of Mutual Fund schemes has been found highest in the year 2005–06 showing 31.26 percent followed by the years 2010–11, 2006–07 and 2013–14 where 28.23, 27.70 and 26.54 percent growth is found respectively. This growth has been contributed due to a major augmentation of new schemes in the close ended category leading to the percentage change to 168.75 as compared to negative growth between 1999–2000 and 2003–04. The CAGR of close ended schemes has also been noticed higher than those of open ended category for the duration 1999–2014 but overall the CAGR of open ended schemes (16.89 percent) is found greater than the close ended schemes (14.32 percent).

Interval Fund which was a new category of schemes, also appeared in the picture in the year 2008–09. This type of scheme combines the features of both open ended and close ended funds. These schemes are open for sale and repurchase at a predetermined period. There are 68 schemes of interval fund coming into the picture in the year 2008–09, but after 2008–09, a downtrend is being seen in this category. After 2009–10 till 2011–12, conducive investment climate was seen in India as many bars were raised like entry load was removed, KYC norms were made mandatory in December 2008–09 and the economy had recovered from global recession, the number of schemes in the Interval scheme category again rose to 65 in the year 2013–14. In the 2014–15 a steep rise can be observed in case of close ended schemes where there is a rise of 25.87 percent in the number of scheme from 2013–14.

In the year 2016–17 and 2017–18 a sudden decline in the number of schemes (-5, 74 and 12.41 percent respectively) is observed. However, the CAGR (11.34%) and the significant values in open ended schemes are clearly indicating that the increase in number of schemes is significant over the years but in the year 2016–17 and 2017–18 there is a step reduction in close ended and interval schemes owing to positive market sentiments, which again took a positive turn in the year 2018–19 where an increase of 6.43 % in the number of schemes is found contributing to an overall increase of more than 2 percent in overall total number of schemes. Hence, the rejection of null Hypothesis is supported.

Table 3: Portfolio Wise Growth of Mutual Fund Schemes in India

Year	Income Schemes		Growth Schemes		Balanced Schemes		Liquid/ Money Market		Gilt		ELSS		Others (ETFs and Funds of Funds)		Total	
	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ
1997-98	84		74		19		0		0		58				235	
1998-99	100	19.05	83	12.16	17	-10.53	17		0		60	3.45			277	17.87
1999-00	113	13	105	26.51	23	35.29	18	5.88	13		65	8.33			337	21.66
2000-01	126	11.5	110	4.76	32	39.13	26	44.44	19	46.15	80	23.08			393	16.62
2001-02	146	15.87	114	3.64	34	6.25	31	19.23	29	52.63	63	-21.25			417	6.11
2002-03	117	-19.86	120	5.26	35	2.94	32	3.23	31	6.9	47	-25.4			382	-8.39
2003-04	131	11.97	126	5	37	5.71	36	12.5	30	-3.23	43	-8.51			403	5.5
2004-05	159	21.37	151	19.84	35	-5.41	39	8.33	30	0	37	-13.95			451	11.91
2005-06	251	57.86	194	28.48	36	2.86	45	15.38	29	-3.33	37	0			592	31.26
2006-07	367	46.22	227	17.01	38	5.56	55	22.22	28	-3.45	40	8.11	1		756	27.7
2007-08	506	37.87	270	18.94	37	-2.63	58	5.45	30	7.14	42	5	13	1200	956	26.46
2008-09	509	0.59	293	8.52	35	-5.41	56	-3.45	34	13.33	47	11.9	27	107.7	1001	4.71
2009-10	367	-27.9	307	4.78	33	-5.71	56	0	35	2.94	48	2.13	36	33.3	882	-11.89
2010-11	591	61.04	328	6.84	32	-3.03	51	-8.93	37	5.71	48	0	44	22.2	1131	28.23
2011-12	775	31.13	303	-7.62	30	-6.25	55	7.84	42	13.51	49	2.08	55	25	1309	15.74
2012-13	760	-1.94	298	-1.65	32	6.67	55	0	42	0	49	0	58	0.05	1294	-1
2013-14	1081	42.24	311	4.36	30	-6.25	53	-3.64	44	4.76	52	6.12	67	0.16	1638	27
2014-15	1249	15.54	379	21.86	25	-16.67	52	-1.89	45	2.27	55	5.77	79	18	1884	15
2015-16	1737	39.07	413	8.97	28	12.00	53	1.92	41	-8.89	60	9.09	88	11.39	2420	28.45
2016-17	1582	-8.92	420	1.69	30	7.14	52	-1.89	41	0.00	64	6.67	92	4.55	2281	-5.74
2017-18	1267	-19.91	442	5.24	31	3.33	52	0.00	38	-7.32	72	12.50	96	4.35	1998	-12.41
2018-19	1262	-0.39	485	9.73	27	-12.90	65	25.00	27	-28.95	69	-4.17	107	11.46	2042	2.20
CAGR	4.68%	2.97%	-1.56%	0.57%	-0.53%	2.51%	11.11%	3.87%								
Ho	Rejected	Rejected	Rejected	Rejected	Rejected			Rejected								
Ha	Accepted	Accepted	Accepted	Accepted	Accepted			Accepted								

Table 3 shows the Portfolio wise growth of Mutual Fund schemes in India for the period 1997–98 to 2018–19

Hypothesis: That the number of schemes launched portfolio wise have not grown significantly over the years.

It presents that, the number of growth schemes rose to 194 in 2005–06 from 74 schemes in 1997–98. In the year 2013–2014, the number of growth schemes were 311 and in the year 2014–15, the number of growth schemes were 379. The growth scheme has secured the highest growth (28.48%) in 2005–2006. It was the result of bullish trend in the Indian equity market. After 2005–06, a major decline in growth rate of growth schemes was seen in 2008–09 (8.52%) owing to Bearish trend in the economy and in 2009–10 (4.78%). In the year 2010–2011, 6.84 percent growth rate was registered. In the year 2011–12 there was a downward movement till 2012–13. Positive growth rate was observed in the year 2013–14 (4.36 %) and in the year 2014–15 (21.86 %). Year 2014–15 registered a robust growth in Growth schemes owing to positive market sentiments. By looking into the income schemes which have enjoyed maximum share, lost their glow in the year 2002–03 where number of growth schemes (120) were more than income schemes (117). From the year 2003–04 an upward trend could be seen in the income schemes till the year 2008–09 after which the scheme got a major setback when the number of income schemes came down by 27.9 percent in the year 2009–10, but they again gained a ground in the market during the year 2010–11 when the number of income schemes grew by 61.04 percent. The impact of bear and bull market can be clearly observed from these trends.

Balanced schemes are the schemes that seek to maintain a balance between growth and regular income. In contrast to growth and income schemes, the balanced schemes have faced the uncertain and volatile scenario in terms of the growth in number of schemes. The number of schemes declined sharply in the year 1998–99 which increased appreciably in the year 1999–2000. These schemes have encountered a negative growth from the year 2009 to 2015. Again a trend reversal is observed in the year 2015–16 when the increase in number of growth scheme became higher than increase in income scheme.

CAGR of Income schemes (4.68 %) is found better than the growth scheme (2.97 %). But in the years 2016–17 (8.92 %), 2017–18 (19.91 %) and 2018–19 (.39 %) there is a steep reduction in number of income schemes which means that the trend may reverse. In the year 2018–19, the increase in the number of growth schemes is 9.73 % in comparison to 5.24 in the year 2018–19. It is also observed that there is a tremendous increase in the number of Liquid/Money market schemes in the year 2018–19 (25 %) since they are getting popular among investors due to their higher returns than saving bank accounts returns, liquidity, tax benefits if kept for more than three years and less risk level. The values of CAGR regarding income, growth, liquid and ELSS schemes supports the rejection of null Hypothesis.

5. ASSETS UNDER MANAGEMENT

Another measure of the performance of mutual fund is assets under management (AUM). This section attempts to bring Category wise, and portfolio-wise AUM of Mutual Fund in India.

5.1 Category wise Asset under Management

After analysing sector wise AUM of Mutual Funds, table 4 exhibits data on the Asset under Management according to category of Mutual Fund schemes. The data is examined and tabulated in table 4. The testable Hypothesis under this section is that there is no significant increase in category wise Asset under Management over the years.

Table 4: Category Wise Asset under Management (amount in crore rupees)

Year	Open Ended Schemes		Close Ended Schemes		Assured Return Schemes		Interval Fund		Total	
	AUM	% Δ	AUM	% Δ	AUM	% Δ	AUM	% Δ	AUM	% Δ
1998–99	37240		16439		14793				68472	
1999–00	68833	84.84	21608	31.44	22564	52.53			113005	65.04
2000–01	57293	-16.76	13613	-37	19681	-12.77			90587	-19.84
2001–02	71938	25.56	10977	-19.36	17679	-10.17			100594	11.05
2002–03	75071	4.35	4033	-63.26	360	-97.96			79464	-21.01
2003–04	134523	79.19	5093	26.28					139616	75.7
2004–05	137983	2.57	11571	127.19					149554	7.12
2005–06	193713	40.39	38149	229.69					231862	55.04
2006–07	217417	12.24	108971	185.65					326388	40.77
2007–08	369239	69.83	135913	24.72					505152	54.77
2008–09	325161	-11.94	89249	-34.33			2890		417300	-17.39
2009–10	532886	63.88	65519	-26.59			15574	438.89	613979	47.13
2010–11	447196	-16.08	126897	93.68			18157	16.58	592250	-3.54
2011–12	441610	-1.24	137634	8.46			7973	-56.08	587217	-0.85
2012–13	573201	29.8	120652	-12.34			7590	-4.8	701443	19.45
2013–14	620317	8.22	192899	59.88			12024	58.42	825240	17.65
2014–15	910077	46.71	164344	-14.8			8366	-30.42	1082757	31.2
2015–16	1053762	15.79	171235	4.19			7827	-6.44	1232824	13.86
2016–17	1573929	49.36	176743	3.22			4584	-41.43	1755256	42.38
2017–18	1944215	23.53	187392	6.03			4,429	-3.38	2136036	21.69
2018–19	2167750	11.50	209342	11.71			2,492	-43.73	2379584	11.40
CAGR	22.53%		13.57%				-1.47%		19.41%	
Ho	Rejected		Rejected						Rejected	
Ha	Accepted		Accepted						Accepted	

Source: (Compiled From Quarterly Update, March Issue, AMFI)

** Indicates significant growth at 99 percent level of confidence

It is depicted from table 4 that Open-end schemes have registered a compounded annual growth rate of 23.71 percent in their AUM. The year-on-year growth in AUM of open-end schemes was found the highest (79.19%) in 2003–04 followed by 2007–08 (69.83%). On an overall basis 2008–09 has registered a sharp decline owing to bearish market sentiments in the market whereas year 1999–2000, 2003–04, 2005–06, 2006–07, 2007–08, 2009–10 and 2014–15 have registered a very high growth in terms of AUM due to Bullish Market sentiments prevailing in the economy. Again a sharp increase is seen in the year 2013–14 where the growth in AUM of closed ended scheme is 59.88 percent.

Similarly in case of open ended category, a sharp increase can be seen in AUM in the year 2014–15 where AUM increased by 46.71 percent. AUM observed a sharp decline in the year 2015–16 which again went up in the year 2016–17. But there is a sudden decline in the percentage change from 2017–18 (21.39 %) to 2018–19 (11.50 %) whereas sudden increase is seen in close ended category where AUM increased from 2017–18 (6.03 %) to 2018–19 (11.71 %). To conclude it can be mentioned that the Asset Under management of category wise schemes has increased over the years till 2016–17 and a downturn can be seen after that.

5.2 Portfolio wise Asset under Management

The current section presents the portfolio wise share of schemes in Asset under Management. The data is presented in table 5. Regarding this table the Hypothesis is that the portfolio wise share in Asset under Management of Mutual Fund scheme has not increased significantly over the years.

Table 5: Portfolio Wise Share in Asset Under Management(amount in crore rupees)

Year	Income Schemes		Growth Schemes		Balanced Sch.		Liquid Sch		Gilt		ELSS		Gold ETF,		TOTAL	
	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ	Amt.	% Δ
1998-99	48372		14622		1909		1092		0		2477				68472	
1999-00	48004	-0.76	30611	109.35	26757	1301.62	2227	103.94	2370	-	3036	22.57			113005	65.04
2000-01	48863	1.79	13483	-55.95	19273	-27.97	4128	85.36	2317	-2.24	2523	-16.9			90587	-19.84
2001-02	55788	14.17	13852	2.74	16954	-12.03	8069	95.47	4163	79.67	1768	-29.92			100594	11.05
2002-03	47564	-14.74	9887	-28.62	3141	-81.47	13734	70.21	3910	-6.08	1228	-30.54			79464	-21.01
2003-04	62524	31.45	23613	138.83	4080	29.89	41704	203.66	6026	54.12	1669	35.91			139616	75.7
2004-05	47605	-23.86	36711	55.47	4867	19.29	54068	29.65	4576	-24.06	1727	3.48			149554	7.12
2005-06	60278	26.62	92867	152.97	7493	53.96	61500	13.75	3135	-31.49	6589	281.53			231862	55.04
2006-07	119322	97.95	113386	22.1	9110	21.58	72006	17.08	2257	-28.01	10211	54.97	96		326388	40.77
2007-08	220762	85.01	156722	38.22	16283	78.74	89402	24.16	2833	25.52	16020	56.89	747	50.6	505152	54.77
2008-09	197343	-10.61	95817	-38.86	10629	-34.72	90594	1.33	6413	126.37	12427	-22.43	4077	81.68	417300	-17.39
2009-10	311715	57.96	174054	81.65	17246	62.25	78094	-13.8	3395	-47.06	24066	93.66	5409	24.62	613979	47.13
2010-11	291975	-6.33	169754	-2.47	18445	6.95	73666	-5.67	3409	0.41	25569	6.25	9432	42.65	592250	-3.54
2011-12	290844	-0.39	158432	-6.67	16261	-11.84	80354	9.08	3659	7.33	23644	-7.53	14023	32.74	587217	-0.85
2012-13	395985	36.15	149777	-5.46	16307	0.28	93392	16.23	8074	-99.9	22731	-3.86	15177	8.22	701443	19.45
2013-14	461550	16.56	165560	10.54	16793	2.98	133280	42.71	6115	120.66	25547	12.39	16395	8.02	825240	17.65
2014-15	516951	12	305669	84.63	26368	57.02	162562	21.97	14614	-24.26	39470	54.5	17123	4.44	1082757	31.21
2015-16	567189	9.72	344707	12.77	39146	48.46	199404	22.66	16306	11.58	41696	5.64	24376	42.36	1232824	13.86
2016-17	749691	32.18	482183	39.88	84763	116.53	314086	57.51	14875	-8.78	61403	47.26	51663	111.94	1758664	42.65
2017-18	788021	5.11	669207	38.79	172151	103.10	335525	6.83	11404	-23.33	80,583	31.24	79145	53.19	2136036	21.46
2018-19	721568	-8.43	796082	18.96	180648	4.94	436224	30.01	8099	-28.98	96,019	19.16	140944	78.08	2379584	11.40
CAGR	14.47%		22.12%		25.55%		34.92%		6.68%		20.07%		83.61%		19.41%	

Table 5 throws light on the Portfolio wise AUM. It is evident that during 2018–19, the AUM is the highest for growth schemes (Rs. 796082 crores) while the AUM under income/debt schemes is Rs. 721568 crores. In the year 2011–12 poor earnings season, downgrade of banks by Moody's, huge current account deficit and depreciating currency have played spoilsport. In terms of growth in AUM, in the year 2012–13 there was still a negative growth (-5.46 %) in the growth scheme which became positive in the year 2013–14 (10.54 %). In the year 2006–07 and 2007–08, when the entire economy was enjoying the fruits of Bullish Market, in the Mutual Fund market also the AUM rose by 40.77 percent and 54.77 percent in the year 2006–07 and 2007–08 respectively. The AUM decreased by -17.39 percent from 2007–08 to 2008–09 owing to Bearish Sentiments prevailing in the Market. In the year 2009–10 when the economy was again witnessing Bullish run, the AUM rose by 47.13 percent. A similar trend could be observed in the year 2014–15 when due to Bullish trend the total AUM of Mutual Fund Industry rose by 31.21 percent. In the year 2016–17 there was a steep increase in AUM except Gilt schemes which has again came down touching its previous percentage increase in the year 2017–18. In the year 2018–19 tremendous increase is seen in the ETFs (78.08 %) and Liquid Schemes (30.01%). On the contrary Income schemes lost its attraction where a decline of 14.47% is seen. But overall there is an increase in overall CAGR at 19.41 percent.

6. CONCLUSIONS AND FINDINGS

There is a phenomenal growth in Mutual Fund Industry. The numbers of mutual funds schemes, with various features, have risen from 235 in 1997–98 to 2042 in 2018–19. The effect of market sentiments is seen in the growth in the number schemes and its AUM. Close ended schemes have regained their charm which were not getting attraction during the years between 2003–04 to 2016–17. In the year 2013–2014, the number of growth schemes were 311 and in the year 2014–15, the number of growth schemes were 379. By looking into the income schemes which have enjoyed maximum share, lost their glow in the year 2002–03 where number of growth schemes (120) were more than income schemes (117). From the year 2003–04 an upward trend could be seen in the income schemes till the year 2008–09 after which the scheme got a major setback when the number of income schemes came down by 27.9 percent in the year 2009–10, but they again gained a ground in the market during the year 2010–11 when the number of income schemes grew by 61.04 percent. Balanced schemes are the schemes that seek to maintain a balance between growth and regular income. In contrast to growth and income schemes, the balanced schemes have faced the uncertain and volatile scenario in terms of the growth in number of schemes. The number of schemes declined sharply in the year 1998–99 which increased appreciably in the year 1999–2000. These schemes have encountered a negative growth from the year 2009 to 2017. CAGR in respect of number of schemes, AUM category wise and portfolio wise was grown significantly over the years referred under study. Hence it can be concluded that Mutual Fund Industry has a significant growth trend in various terms.

The effects of Market sentiments could be clearly observed in the AUM of the schemes. In the year 2006–07 and 2007–08, when the entire economy was enjoying the fruits of Bullish Market, the Mutual Fund market also was flourishing as the AUM rose by 40.77 percent and 54.77 percent in the year 2006–07 and 2007–08 respectively. The AUM decreased by -17.39 percent from 2007–08 to 2008–09 owing to Bearish Sentiments prevailing in the Market. In the year 2009–10 when the economy was again witnessing Bullish run, the AUM rose by 47.13 percent. A similar trend could be observed in the year 2014–15 when due to Bullish trend the total AUM of the Mutual Fund Industry rose by 31.21 percent.

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Dr. Rashmi Bhargava is a regular faculty having an experience of more than 15 years at DAVIM. She is working as an Assistant Professor. She has done doctorate in the field of Finance and written many research papers during and after her submission of thesis. She has presented papers in National and International Conferences and has attended several conferences and workshops. Apart from teaching and coordinating various administrative and academic activities, she is also guiding students for various research projects in the field of Finance. After clearing UGC Net exam early in her career, she has also completed her M.Phil in Finance field in the year 2008. In the year 2016 she got awarded with Doctorate degree from MD University, Rohtak in the field of Finance where the area of research was Mutual Funds. Dr Rashmi Bhargava has an extensive experience of teaching various subjects of Finance such as Financial Accounting, Management Accounting, Cost Accounting, Financial Management, Money and Banking, Investment Banking, Management of Financial Services, Capital Markets and Security Analysis and Portfolio Management. She is involved in teaching students of Undergraduate and Post Graduate courses. She has got many appreciation awards for the excellent academic results of the students taught by her.

